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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,234	04/14/2004	Fumio Ohtomo	1715663	6337
7590	01/05/2006		EXAMINER RATCLIFFE, LUKE D	
Robert J. Schneider Chapman and Cutler LLP 16th Floor 111 West Monroe Street Chicago, IL 60603-4080			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/824,234	Applicant(s) OHTOMO ET AL.	
	Examiner Luke D. Ratcliffe	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 6, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Riegl (2003/0090646).

Referring to **claim 1**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15).

Referring to **claim 4**, Riegl shows an arithmetic processing portion that displays the model of the expected arrangement at completing of the object on the display portion based on detection of the angle-measuring portion according to a change in the aimed direction. It is inherent that with the technology of an angle measuring portion on a surveying system that the input of that to the arithmetic processing portion will influence the model.

Referring to **claim 6**, Riegl shows an arithmetic processing portion that calculates the model based on positional information of the surveying-apparatus

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body including height-thereof the angle between the reference direction and the aimed direction when the angle-measuring portion has detected as a horizontal angle and a vertical angle, and the design data, and displays said calculated model on the display portion (figures 1 and 2).

Referring to **claim 8**, Riegl shows an electronically surveying apparatus that includes a ranging portion (paragraph 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 5, 7, 9, 14, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riegl (2003/0090646) in view of Yoshida (6229598).

Referring to **claims 2 and 3**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15). However Riegl does not show a telescope portion.

Yoshida does show an electronically surveying apparatus that includes a telescope portion (figure 4). It would have been obvious to modify Riegl to

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include a telescoping portion taught by Yoshida because this allows a user to hit a mark with greater precision.

Referring to **claim 5**, Ringle shows an arithmetic processing portion that displays the model of the expected arrangement at completion of the object on the displaying portion based on detection of the angle-measuring portion according to a change in the viewing direction. It is inherent that the information from the change in viewing direction of the angle-measuring portion will have an influence on the model (see figure 1).

Referring to **claim 7**, Ringle shows an arithmetic processing portion that calculates the model based on positional information of the surveying-apparatus body including height-thereof the angle between the reference direction and the aimed direction when the angle-measuring portion has detected as a horizontal angle and a vertical angle, and the design data, and displays said calculated model on the display portion (figures 1 and 2).

Referring to **claims 9 and 16**, Ringle shows an electronically surveying apparatus that includes a ranging portion (paragraph 3).

Referring to **claim 14**, Ringle shows an arithmetic processing portion that displays the model of the expected arrangement at completing of the object on the display portion based on detection of the angle-measuring portion according to a change in the aimed direction. It is inherent that with the technology of an angle measuring portion on a surveying system that the input of that to the arithmetic processing portion will influence the model.

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Referring to **claim 15**, Riegl shows an arithmetic processing portion that calculates the model based on positional information of the surveying-apparatus body including height-thereof the angle between the reference direction and the aimed direction when the angle-measuring portion has detected as a horizontal angle and a vertical angle, and the design data, and displays said calculated model on the display portion (figures 1 and 2).

Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riegl (2003/0090646) in view of Lundberg (5100229).

Referring to **claims 10 and 17**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15). However Riegl does not show an arithmetic processing portion that zooms the model and displays the zoomed model on the display portion.

Lundberg shows an arithmetic processing portion that zooms the model and displays the zoomed model on the display portion (column 12 lines 15-45). It would have been obvious to modify Riegl to include the arithmetic processing portion taught by Lundberg because this allows the user to see with more clarity the model on the display portion.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riegl (2003/0090646) in view of Yoshida (6229598) as applied to claim 2 above, and further in view of Lundberg (5100229).

Referring to **claim 11**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15). However Riegl does not show a telescope portion.

Yoshida does show an electronically surveying apparatus that includes a telescope portion (figure 4). However neither Riegl or Yoshida show a arithmetic processing portion that zooms the model and displays the zoomed model on the display portion.

Lundberg shows an arithmetic processing portion that zooms the model and displays the zoomed model on the display portion (column 12 lines 15-45). It would have been obvious to further modify Riegl to include the arithmetic processing portion taught by Lundberg because this allows the user to see with more clarity the model on the display portion.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riegl (2003/0090646) in view of Julian (5671160).

Referring to **claim 12**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15). However Riegl does not show an arithmetic processing portion that calculates an allowable range with respect to the model.

Julian shows an electronically surveying apparatus that shows an arithmetic processing portion that calculates an allowable range with respect to the model (column 9 and 10). It would have been obvious to modify Riegl to

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include the arithmetic processing portion that calculates an allowable range because this gives the user a sense of possible ranges to the model.

Claims 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riegl (2003/0090646) in view of Yoshida (6229598) as applied to claims 2 and 3 above, and further in view of Julian (5671160).

Referring to **claims 13 and 18**, Riegl shows an electronically surveying apparatus with a storing portion (paragraph 20), an angle-measuring portion (paragraph 43 and figure 1), an arithmetic processing portion (paragraphs 9-15), and a display portion (paragraph 15). However Riegl does not show a telescope portion.

Yoshida does show an electronically surveying apparatus that includes a telescope portion (figure 4). However neither of them shows an arithmetic processing portion that calculates an allowable range with respect to the model.

Julian shows an electronically surveying apparatus that shows an arithmetic processing portion that calculates an allowable range with respect to the model (column 9 and 10). It would have been obvious to further modify Riegl to include the arithmetic processing portion that calculates an allowable range because this gives the user a sense of possible ranges to the model.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke D. Ratcliffe whose telephone number is 571-272-3110. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The


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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LDR

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